

SECTION 639

CONSTRUCTION LAYOUT STAKES

639.1-DESCRIPTION:

When this item is included in the Proposal, it shall consist of furnishing, placing, and maintaining construction layout stakes necessary for the proper prosecution of the work under the Contract, all in accordance with these Specifications.

639.2-MATERIALS:

Wood stakes as specified.

639.3-CONSTRUCTION METHODS:

The Division will locate and reference the centerline and will establish bench marks along the line of the improvement for the proper layout of the work. The Contractor shall make all calculations involved and shall furnish and place all layout stakes.

The Contractor shall provide field forces and shall set all additional stakes needed, such as offset stakes, reference point stakes, slope stakes, pavement and curb line and grade stakes, stakes for bridges, sewers, roadway drainage, pipe underdrains, paved gutter, fence, culverts or other structures, supplementary bench marks, and any other horizontal or vertical controls necessary to secure a correct layout of the work. The Contractor shall also do all layout work and shall set stakes necessary for carrying out utility changes when such utility changes are an obligation of the Contractor under the Contract. The location of the slope stakes for grading work shall be determined by a calculation method. Stakes for line and grade of pavement and curb shall be set at station intervals of 25 ft. (10 meters) maximum distance on curves and at 50 ft. (20 meters) maximum distance on tangents. Elevation control hubs with guard stakes shall be set, at a convenient distance outside the construction limits, opposite every 50-ft (20 meters) station and all stations where original cross-sections have been taken. The centerline station, the distance from centerline, and the elevation of the hub shall be recorded on each guard stake.

For right-of-way staking, hubs with guard stakes shall be set on both sides of roadway at all locations where right-of-way changes width; the station number and the distance from the centerline shall be marked on each guard stake.

The Contractor shall be responsible for having the layout staking work conform to the lines, grades, elevations, and dimensions called for on the Plans.

The Contractor shall furnish a copy of their survey records for checking by the Engineer and for the Division's permanent file. These records shall be furnished as they are completed during the progress of the work. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of their responsibility to secure the proper dimensions, grades, and elevations of the several parts of the work.

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The Contractor shall exercise care in the preservation of stakes and bench marks and shall have then reset at their expense when any are damaged, lost, displaced or removed. The Contractor shall use competent personnel and suitable equipment for the layout work required and shall provide that it be done under the supervision of, or directed by, a Registered Professional Engineer or Registered Land Surveyor. The Contractor shall not engage the services of any person or persons in the employ of the Division for the performance of any of the work covered by this item.

639.4-METHOD OF MEASUREMENT:

"Construction Layout Stakes" will be measured as a complete unit.

639.5-BASIS OF PAYMENT:

The quantity, determined as provided above, will be paid for at the contract unit price bid for the item below, which price and payment shall be full compensation for furnishing, setting, maintaining, and resetting, when necessary, the stakes, and for furnishing all engineering personnel, equipment, materials, and all incidentals.

639.6-PAY ITEMS:

ITEM	DESCRIPTION	UNIT
639001-*	CONSTRUCTION LAYOUT STAKE	LUMP SUM

* Sequence number

SECTION 640
FIELD OFFICE AND STORAGE BUILDING

640.1-DESCRIPTION:

This work shall consist of furnishing and maintaining in good condition suitable offices for the exclusive use of the Engineer as a field office or for making field tests, a storage building for concrete cylinder curing tanks, and equipment for the field office, all in accordance with these Specifications.

640.2-MATERIALS:

Not specified.

640.3-LOCATION AND TIME OF ERECTION:

The field office and storage building shall be set up at approved locations on or in the immediate vicinity of the Project. They shall be separated from any building used by the Contractor.

The field office and storage building shall be set up, equipped, and made ready for use at least three days prior to the beginning of the work on the project.

640.4-STANDARD FIELD OFFICE AND STORAGE BUILDING: